



EASTERN IOWA DX ASSOCIATION NEWSLETTER

WINTER 1984

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EIDXA Officers:

President: Joe Finkstein WOMJN
Secretary: Gary Letchford KOLUZ
Vice Pres(editor): Tom Lindgren WQWP

MEETING ANNOUNCEMENT

The first meeting of the Eastern Iowa DX Association in 1984 will be held at the REC Building in Marion on Friday January 20th at 7:30PM.

A short business meeting is planned to be followed by a double program. KJOD, Eric Santon, will be showing his beautiful slides and tell us the story of his Anguilla Island trip. Following that Bud, NOIL, will give us a talk and demonstration of Robotics. Bud who is co-designer of the now famous Keyers he and Jeff designed, is also a very qualified teacher of microprocessor software. He has taught a Robotics class at Coe College in Cedar Rapids and will be bringing along his demonstration Robot. It should be a fun evening with pizza and cheer to follow the meeting. CU there!

TNX to the following people for inputs to the Newsletter: WOVX, WOMJN, W01Z, WOSR, KOLUZ, KKOR, KOEVB, and W0EAN a very special tnx (THE PRINTING)!

The 1983 contest EIDXA claimed score:

This years contests were very well represented by our club members in particular the CB World Wide contests. Band conditions were not particularly spectacular especially 10 meters but some nice scores were earned amongst our members. It should be noted that these scores are not complete or official.

Sweepstakes CW

NO5A 149,184 pts.
KOLUZ 143,226
W0EJ 125,652
KCOXK 59,540
W01Z 21,312

Sweepstakes SSB

W0EJ 170,200 pts.
KCOXK 91,440
KOLUZ 48,100
NO5A 41,860
KOINR 32,708
W01Z 17,161

CB World Wide SSB

Multi op.

KOJSY, (KJOD, 1,195,520 pts.
KOEBB, WQWP)
KOLUZ, (KB0FP, 913,320
KKOR, KOINR)
K1OC, (KDOHY) 411,579

Single op.

W0EJ 575,592 pts.
NO5A 446,652
WQVX 340,042
W01Z 277,440
KCOXK 186,816
KBOV 162,946
KOVZR 152,154
K0BT 102,258
KDOB 80,620 (15m)

CB World Wide CW

KOLUZ 996,391 pts.
WQWP 869,000
WQVX 146,016
KCOXK 45,076

The following interview was conducted over two meters on December 18th with Eric, KJOD. He operated from Anguilla Island as VP2EAG during the November 1983 CW World Wide CW contest.

(WOWP) "Eric congratulations on a very fine dx-pedition. We had a lot of fun chasing your signal around the bands. Can you describe briefly the beginning of your trip and how you arrived at your destination?"

(KJOD) "Thanks. I left Cedar Rapids on an Ozark flight at 7AM, arrived in St. Louis with a short layover and then on to Miami. I had a five hour wait in Miami before flying on to St. Martin. The flight to St. Martin took a little over three hours aboard a 727. I was quite cramped for space with my carry on rig occupying most of my leg room. It was about 11PM before we cleared customs and were settled in our rooms. At 7AM the next day we took a short boat ride to Anguilla which is only about 5 miles from St. Martin."

(WOWP) "Can you give us a geographical description of Anguilla?"

(KJOD) "Yes. The word Anguilla is a French word meaning "That Fish". The island is a low flat coral reef raised up millennia ago by volcanic activity. The island is three miles wide and sixteen miles long. The highest point on the island is Crocus Hill which is 213 feet above sea level. The island consists of about 30 white sand beaches and approximately the same number of bays. There are no towns. The main bay called the Valley is where all the government offices are located."

(WOWP) "Who were the two other amateurs you went with?"

(KJOD) "KUBE, Jeff and KBCV, Walt both from Columbus, Ohio were the other two ops. Jeff is a computer terminal operator working at a Columbus bank and Walt is a telephone company employee working for Ohio Bell. Jeff, age 23, was assigned the call VP2EEW and Walt, age 53, was operating with the call VP2ES."

"N7DF's referral service was the agency responsible for me meeting these two gentlemen. I was the first to use Lee's service."

(WOWP) "That leads me to my next question. Did

you have any choice on callsigns?"

(KJOD) "Mr. Hodge the telecommunications officer changed his policy as of October and there is no longer choosing of callsigns. I thought about donating to the Boy Scouts for a special call but thought better of it. Hi Hi! They are issued in sequence now."

(WOWP) "What was your living quarters like?"

(KJOD) "We rented the top of a six bedroom house located on the northern part of the island. Our part consisted of three bedrooms, two baths with shower facilities, a kitchen, and large living room which was our operating room."

"The station location, the living room, was made up of three separate operating positions. They consisted of two tables and a door supported by two chairs. Each of us had our own gear and antennas arranged as we wished. As it turned out I think it would have been better to have each of the operating positions in separate rooms mainly to keep the confusion to a minimum and reduce RFI."

"The outside of the house along one side consisted of a ten foot wide patio which made for good support for our step ladder. The front of the house had a big porch which was handy for storage of some of our gear. The roof of the house was flat with the concrete reinforcing rods sticking up as much as four feet around the perimeter of the building. I should note that all the houses on the island are concrete structures with flat roofs."

(WOWP) "Were the natives friendly and what were they like to communicate with?"

(KJOD) "I think the natives were as happy to see us as were to be there. They definitely were friendly."

"The natives speak a language which is a cross between Dutch, French and English with a pronounced British accent. They talked very loud and fast making it hard to understand them. By the same token they could easily understand us with our slow speech."

"The island's inhabitants are very good trustworthy people. We asked one of the island's policemen when the last time they had to lock some one up in jail and he replied it had been a couple of years. We can attest to their honesty. We never locked our house or our car and had absolutely no problems with security."

(WOWP) "What were some of the more interesting things to see and do on Anguilla?"

(KJOD) "Probably the two most beautiful things on the island are Rhode Bay and Crocus Bay. Rhode Bay is the main harbor to the island. It is filled with the color of sailing boats and cargo ships lining its shore. It has several shops and restaurants to accommodate the sailors. Crocus Bay is also very picturesque. I took my sunset photos there which I'll be showing at the meeting."

"Crocus Bay has a little restaurant called Roy's Place, which is owned by an English couple. We ate most of our evening meals there."

(WOWP) "What kind of gear, antennas, and generator did you use?"

(KJOD) "We had three SB200s, two Kenwood TS830Ss, one Kenwood TS820S and a Hal Telereader 6850. The antennas consisted of a three element monoband ten meter yagi, a Wilson system 33 for twenty and fifteen meters, a quarter wave vertical with a hundred radials for forty meters, a delta loop at seventy feet for eighty meters, a Zepp open wire fed with a tuner for eighty, a dipole on one hundred and sixty meters and a fifteen hundred foot beverage for receiving on the low bands. The beams were mounted on a ten foot tower section positioned on the roof of the house."

"The generator was a 12kw unit."

(WOWP) "What band was the best during your stay?"

(KJOD) "Forty meter CW definitely. Each of us made over a thousand QSOs on that band alone. Twenty was excellent during daylight hours."

(WOWP) "How did you do in the contest? Realizing of course that you did have generator troubles."

(KJOD) "I had about two thousand QSOs and am not sure on the multipliers yet. The effort was twenty meter single band. The generator was off most of Saturday with problems. I have a tape with some of the beehive pile ups I had Sunday which I'll bring to the meeting."

(WOWP) "Who had the big signals from the EIDXers worked? Who were the stations that worked you on all bands?"

(KJOD) "K06VB worked me on seven bands, W01Z six bands and several on five bands."

"The big signals, K0JSY and W0EJ on the high

bands, K0JSY on forty (except for ADOC the Collins station), K0LUI on eighty meters and K06VB on one hundred and sixty meters."

(WOWP) "Other than the contest did you operate much?"

(KJOD) "Yes but mostly in the evenings and some mornings on the high bands. Generally we were out taking in the beaches and the sun shine!"

(WOWP) "Were the trip expenses about what you expected? Did you feel the trip was worth it?"

(KJOD) "Yes the expenses came out exactly as I anticipated; around one thousand dollars plus souvenirs."

"The trip was as I expected and more. Anguilla is more beautiful than I ever imagined."

(WOWP) "One final question Eric. If and when you ever embark on another trip as this one, is there anything you would bring or do differently?"

(KJOD) "I would take along a simple antenna like a Zepp or dipole just to get on the air right away with. It would be essential to build bandpass filters to eliminate all the RFI problems associated with a multi-operator type dx-pedition."

(WOWP) "Thanks Eric. We'll be looking forward to your slide show at the upcoming club meeting."

New Manager

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Tom, K0VZR, is now the QSL manager for TL8TX. Tom passes along the following information on Tex, T18TX. Tex is active on the high bands SSB only, between the hours 1700-2200z. He can often be found on Shook's net (K1IDE) along with J37AH, ZD7BN, XT2, TJ, and often SR8AL.

Tex is of British decent operating with an FT707 and Butternut vertical. His QTH is the city of Nola 200 miles SW of Bangi the capital.

Tom is also corresponding with Doug Neveer in TT, Chad. Doug is trying very hard to acquire a license during his missionary commitment in Chad. Doug has all the equipment with him and is ready to go. Tom will probably be handling the QSL duties if Doug is able to operate.

The President's Corner.....

Well, here it is 1984 already. The holidays are over and we are well into a typical Iowa winter with snow piling up and the temperatures often dipping below zero.

We are also in the middle of the 1983-84 contest season. Although I was out of town for most of the two CQ Worldwide weekends; I understand that we had good club participation even with the higher frequency bands folding early in the evening. There are still a lot more contests to look forward to during the next few months; with the ARRL DX, the CQ Worldwide 160M, and the CQ Worldwide WPX contests being among the more popular ones. However, if you plan to operate only the higher frequency bands, you will probably be able to go to bed early. That's because we are now in the downward part of sunspot cycle 21, and it's going to get worse before it gets better. Cycle 21 started in mid-1976 with an SSN (Smoothed Sunspot Number) of 12, peaked to 165 in December 1979, and will bottom out again sometime between now and 1987. For 1984, we will start the year with an SSN of 68 and it is forecasted to drop to 48 by December. According to CQ, typical wintertime propagation will continue during January with MUF's being high during the daylight hours and dropping to seasonally low values during hours of darkness. So, for the upcoming contests, 20, 15, and 10 meters should have good openings during the day, with 160, 80, and 40 meters being good nighttime DX bands.

Speaking of nighttime DXing, have you been monitoring our repeater recently in the evenings? It seems that a number of our members (W0VX, W0IZ, K0CQ, K0LUZ, W0EJ, and K0VZR) are chasing DXCC on 80 meters. For all the details, see the W0VX article also in this Newsletter. Good luck guys!

Those of you who attended the last club meeting might recall my mentioning that W4NIM and I are working on putting a computerized RTTY bulletin board (mail box) system on 2 meters. Although this project is going a little slower than Bob and I had planned, we now have most of the equipment for the system; an Apple computer, a Wilson Mk-II transceiver (that's a little sick), and a nice software package. As soon as we can get the radio fixed and build a 25 watt PA, we should be ready to put it on the air. When the system is operational, users will be able to access the system on 2 meters to read bulletins, as well as leave and pick up messages from other users. I am hoping that when the system gets going, club members will use it to leave DX information and tips for other members. If anyone is interested in either working on this project, or getting information on computerized RTTY, please give me a call.

Even with the snowy-icy weather we have been experiencing thus far this winter, our club repeater has been working quite well; except for the one time the link got noisier due to antenna ice. Since the last club meeting, K0VM and W4NIM have checked the 145.19 MHz antenna VSWR and have kicked up the power on the transmitter. I hope this has helped those of you outside of the Cedar Rapids metro area. While I am on the subject of the repeater, I would like to note that we still seem to be having some "kerchunking" without identifying on our club repeater. As trustee of the EIDXA Repeater, I am compelled to remind our repeater users that the practice of transmitting without identifying is a violation of part 97 of the FCC rules. Also, it is not necessary to "kerchunk" the repeater before you make a call; either to bring it up or to force a CW ID. The repeater is carrier operated, and it will come up as soon as you transmit on the input frequency. When the repeater does CW ID, the deviation on the ID is 1 kHz lower than the voice audio deviation, so there should be no problem talking over it.

I hope all of you can make it to our January 20th meeting, for which we have planned two interesting programs: KJOD speaking on his recent DXpedition, and N0IF speaking on robotics.

From your 1984 officers (W0WP, K0LUZ, and myself), best wishes for the New Year. We hope that 1984 brings each of you good DXing and mailboxes full of DX cards every day.

73 de W0MJH



DX Updates

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The following DXCC totals were found in the December 1983 QST magazine. If your call doesn't appear either you have not updated your DXCC within the last two years or the editor did not find your callsign embedded in the microscopic type; if the latter my sincere appologies.

1 denotes honor roll

Mixed

1327 K06VB
1325 W01Z
1319 W0SR
1317 K0LUZ
312 N4RR
312 W0WP
306 W0VX
301 K301
291 K20C
288 K000
280 W0EJ
280 K0JSY
271 K000
266 K0CF
250 K0AL
231 AK0M
205 K0INR
201 K0VZR
159 K00X
150 K000
137 K00Z

SSB

316 W0SR
297 W01Z
291 K0GT
291 K20C
280 K0JSY
280 N0AFL
280 W00AWL
271 W0EAN
262 K0LUZ
257 W0VX
251 K0CF
231 K0PP
225 K000
200 K0VZR
180 K0INR
162 AK0P
156 W0PPF
124 K00X
102 A00Z

CW

306 W0WP
300 W0SR
280 N4RR
267 K000
237 W0VX
213 W0EJ
192 K000
176 AK0M
132 AK0P
125 K0INR
123 K000

80 Meter Want List

de W0VX

For several months there has been an 80 meter want list in use by several of the club members who are actively pursuing 5 Band DXCC. It started out with only three of us interested but quickly grew to six as more members got serious about finishing off 80 meters. Current participants include W0EJ, W01Z, K0LUZ, K000, W0VX, and K0VZR. Most of us have 100 confirmed on all bands but 80. I think we have all the serious 80 meter types on the list but I am writing this on the outside chance that someone got missed.

Because of the two page format that I am using for the list, participation is limited to 6 stations with a possible stretch to 7 if we squeeze things a bit. W01Z is nearing the magic 100 confirmed mark and will be dropping off the list (and possibly taking down his 80 meter antenna!) when he reaches it so there will be room for more participants if someone is interested. To get on the list you must be very active on 80 and be interested in working new ones at any hour of the night. You must also be willing to make and receive "one ringers" to get the rest of the guys on the repeater to work the new one. If you are interested, active, and serious about 80 let me know and we will get you on the list.

A few additional guidelines might also be useful. If you don't have an Extra class license you might as well forget it because over 90% of the 80 meter DX is in the Extra CW and SSB subbands. If you can't get into the repeater, you will not benefit from the list since all coordination and spotting is done on the 145.19 machine. If you get on the list and become inactive for whatever good legitimate reason, you will be dropped from the list and can rejoin when you again become active. While these ground rules may seem hard nosed to some, they are necessary if we are to achieve our individual goals of 100 countries confirmed on 80 meters. Let me know if you want on.

Editors Notes

With the tough winter weather and the relatively poor band conditions (especially 2B and 21mhz), it has given some of us dxers time to get to know are families again and even find time to pursue a secondary hobby. Probably the most common of these secondary hobbies is computers. With the advent of the affordable systems on the market now most of us have one system or another available. These computer gadgets can be very intriguing, edgucational, frustrating and fun. They also can lend themselves as very handy tools to compliment the dxer both in operating and file keeping.

Some of us, myself in particular, needs help in writing software to fit our particular needs; dupe programs, cw sending and recieving prograas, oscar orbit time crossings, etc. I am willing to print any ham related software, hardware interface and programing hints and aids in our newsletter. I know we have plenty of talent amongst our members.

I am including in this issue of the newsletter a listing of a very simple label printing program written in Apple Soft Basic which prints the QSL card information on mailing labels. An example of one is shown here before the listing. Of course it could very easily be made to work with any of the printers and computers you may have. This particular program is written to control the Gemini 10X.

It is started out with a print menu which gives various codes to do particular types of type elite, pica, double strike and so on. These can easily be substituted in the program to make the labels with various fancy type.

TO ARS: BYBAA
CONFIRM QSO ON: 8-23-83 0128Z
14MHZ TWO WAY--CW 599

```

4 REM $$
5 REM $$PRINTING EFFECTS PROGRAM
  $$
6 REM $$
20 ESC$ = CHR$ (27);LF$ = CHR$
  (10);FF$ = CHR$ (12);CR$ =
  CHR$ (13)
30 PICA$ = ESC$ + "B" + CHR$ (1)
  ;ELITE$ = ESC$ + "B" + CHR$
  (12);COMP$ = ESC$ + "B" + CHR$
  (3)
40 SPR$ = ESC$ + "S" + CHR$ (0);
  SUB$ = ESC$ + "S" + CHR$ (1)
  ;CAN$ = ESC$ + "T"
50 ITALIC$ = ESC$ + CHR$ (52)
55 STND$ = ESC$ + CHR$ (53)
60 WIDE$ = CHR$ (14);CWIDE$ = CHR$
  (20);PASET$ = ESC$ + "B"
70 EMPH$ = ESC$ + "E";CEMPH$ = ES
  C$ + "F";DBLS$ = ESC$ + "G";
  CDBLS$ = ESC$ + "H"
80 DL$ = CHR$ (127)
200 INPUT "CALLSIGN WORKED?";AS
210 PRINT " "
220 INPUT "DATE?";B$
230 PRINT " "
240 INPUT "TIME?";E$
250 PRINT " "
260 INPUT "BAND?";C$
270 PRINT " "
280 INPUT "MODE?";D$
290 PRINT CHR$ (4)"PR#1"
300 PRINT PASET$;ELITE$;DL$;"TO
  ARS: ";WIDE$;DBLS$;A$;CDBLS$

310 PRINT PASET$;DL$;CWIDE$;" CO
  NFIRM QSO ON: ";DBLS$;B$;" "
  ;E$;"Z "
320 PRINT PASET$;DL$;" ";C$;CDBL
  S$;"MHZ ";TWO WAY--;DBLS$;
  D$;CDBLS$
330 PRINT " "
340 PRINT " "
375 PRINT CHR$ (4)"PR#0"
380 INPUT "ANOTHER QSL?(Y OR N)"
  ;F$
390 IF F$ = CHR$ (89) THEN GOTO
  200
400 END

```

CONTEST QSLing

de WØVX

There are many advantages to 100% QSLing contacts in a DX Contest. The largest single advantage to a contester is that the DX station is more likely to recognize your call in the next contest if he has also seen your QSL card. The QSL becomes sort of a call sign "memory refresh" device for the DX station. The ARRL Bureau makes it really cheap to send out cards. The cards you get back are also interesting, colorful, and may some day help you get that Oblast, Worked all Zimbabwe, or Islands of the Air award that you don't want now but may some day. Many DX stations are also working on awards such as 5 Band WAS and USA Counties Awards and do appreciate your card even if they don't necessarily answer it! If you are still not convinced and/or don't own a computer, skip the rest of this!

There is a fairly painless way to QSL after a contest by using a personal computer and some relatively simple Basic programs. The computer can be used to dupe each band and prepare an alphabetized set of QSL card labels for the entire contest. It doesn't require endless hours of data entry either. In addition to the computer you will need Basic, or some other language you are familiar with, and a word processor or text editor to create data files.

Begin by creating a file for each date of the contest on each band. For example the CQ WW CW contest would have two files for each band, one for 26 Nov 83 and one for 27 Nov 83. Next enter the time and call of each QSO in the appropriate file. My 20 meter 26 Nov 83 file looks like;

0000,JG1NBD
0003,VE7EQD
0005,JA3YBF
0007,JA1IDY etc.

Assuming you gave them all "59904" for a report, that is all the data you have to enter. The computer will do the rest. Since you are only entering the time and call, data entry is fast.

Next write a Basic program to read each file, add the appropriate date and band info and re-write the new file to disk or tape. (This is easy to do but the explanation is dependant on your machine's syntax and is beyond the scope of

the newsletter. Contact me if you need help.)

The 20 meter 26 Nov 83 file now looks like;

0000,JG1NBD,26 XI 83,14
0003,VE7EQD,26 XI 83,14
0005,JA3YBF,26 XI 83,14
0007,JA1IDY,26 XI 83,14 etc.

Next combine (ie. add together) the two files for each band. On the IBM PC this is done by;

CCPY FILE1+FILE2 20MFILE

Whatever the DOS command is on your computer, once you have one file for all the 20 meter QSOs you are ready to dupe that band if you want to. Dupe programs have been published in the magazines but basically you can use a bubble sort on the calls and look for the same call to be repeated. You can now print a nice alphabetized summary sheet for each band if you want to.

Next combine the individual band files to create one big file that has all the contest data in it. Now use a bubble sort on the calls to alphabetize the entire contest file. It will take the computer quite some time (10 minutes or more) to sort through this if you made very many contacts. It is however a heck of a lot faster than sorting the QSLs by hand after they are printed. Make sure you print some sort of status on the screen so you know the machine is still alive and working during the sort.

Once the file is sorted you are ready to print the QSL labels. Your imagination and the capabilities of your printer are the only limits on what you can do here. At the bottom of the page is an example of what I used for the CQ WW CW and SSB contests this year.

This entire process may sound complex but it really isn't that bad. I had the QSLs for the CQ WW CW printed Sunday night right after the contest! The programming is almost more difficult to explain than it is to do and the data entry is really fast since you only input time and call sign. I would be interested in hearing from others in the club who are doing computer QSLing and logging.

CONFIRMING 1983 CQ WW CW QSO
WITH: JG1NBD

DATE UTC RST MHz
26-XI-83 0000 599 14
TNX for QSO. PSE QSL. 73, Dave

Tidbits--
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WDOAWL and NOAFL each worked XU1SS on 21mhz SSB one afternoon this Fall. Terry and Dave are the only ones in the club to have done so on SSB.

XU1KC QSLs have been received by WO1Z, KCOXK, KCOQ and WOMP. The contacts were all made within several minutes of each other on 15 meter CW last August.

V4RR Roger is now relocated in Sterling-Rockfalls. He has purchased a new house overlooking a mile wide river. Roger said his new QTH is on a hill not in a valley contrasting his last QTH. He plans on attacking the bands with a pair of 80 foot towers and his arsenal of antennas. Look for Roger in the pileups starting this Spring.

The low bands have been very productive for some. WO1Z, WOVY, KCOQ, and others have really been working DX goodies on 80 meters. Some of the notable 80 meter DX reported on two meters during the month of December include DK6SI/9L1, 3B8CF, FROFLD, VS6DD, 73OCT, W6QL/HCB, VP2EAG (Eric), KT6V/AH9, just to name a few.

160 meters has been red hot too. Just read K06VB's letter which is else where in this newsletter. K06T was noting on two meters how he has been working a few good things down there also. Gary K06T has been busy with home remodeling. His latest one being an addition onto his Kitchen.

The guys in Waterloo have a new power to contend with, KKOR. Bob, with a new Heathkit amplifier is now breaking pileups on all bands easily with it. Bob enjoys working the low bands especially in the mornings; but due to his work assignment change which requires a 50 mile drive to Eldora every workday morning, Bob is driving instead of tuning in the AMs.

KJ0D is busy with school work and tennis. He is hoping to get the QSLs out from his VP2 operation during the month of February.

K0J5Y, Keith, purchased more land adjacent to his QTH giving him more antenna space. He also had the envious honor of visiting with Art Collins, WOCIX, in Dallas, Texas during a recent business trip. Keith had a private tour of Art's business enterprise and saw his amateur radio station.

Dog-gon-it! We are loosing another club member. AKOM, Steve, has taken on a new job in St. Louis. Steve has already moved from the area and is working

for Emerson Electronics. He is a EE previously employed at John Deere in Waterloo. Good Luck Steve!

KD0D made the switch back to the basics. Glenn put up a Zepp antenna for 80 and 40 meters. Says its the best antenna he has used on those bands from his QTH. Glenn has had line noise problems this season, but still makes a lot of good DX QSDs on the low bands.

For Sale

Wilson Yagis-- 4 element 20 meter monobander (M420) and a 3 element interlaced 10 and 15 meter (D833). Contact Glenn KD0D if interested.

Wanted

K06VB is looking for a couple of large air-variable capacitors for a tuner.

More Tidbits--

Bob Joy, W0EAN, is looking forward to a trip to China early in 1984. We are hoping Bob gets a chance to visit BY1PK (maybe even operate!).

Bob's son Brian, KCOXK, has been very active in the contests this season and really is fast becoming one of the better radio contesters in the state. It is worth noting that Brian has over 200 countries now but says he still needs BY.

KD0FP, Tom, up in Shellrock has built himself a very fine antenna farm. He has himself a tower and beam for each of the bands 10 meters thru 40 meters. His ace in the hole is a three element KLM on 40 meters on top of a silo 100 foot high. Each of the antennas is fed seperately with hardline for extra efficiency. The group in Waterloo K0LUZ, KKOR, K2OC, and neighbor K0INR all pitched in to help construct the station.

Jeff, KCOQ and Bud, N011 have really done a swell job on there new memory keyer. It is micro-computer based with many superb features such as numerical sequencing for contests, variable weight control, many combinations of message selection, code practice capability, and more. Quite a few of our members have built one and all are very pleased.

Jack Muckler, NBOH (W0YAB), has been busy adding on an addition to his house. He hopes to convert the room into a hamshack. We all hope the XYL will go along with Jack's plans.

W0EJ has been active this contest season. He was kind of quiet last season after a blistering season the year before. Wade has the best signal on 160 meters with his sloper at 100 foot plus. He is looking for KL7 on that band to complete his WAS.

Our members in Marshalltown, W0E1F and AKOP have both been heard recently. AKOP, Gene, can be heard on 80 meter cw in the wee hours working DX. It was nice seeing Bob, W0E1F, pile breaking on 20 meters last week.

W0SR confirmed BY earlier this month. He managed a QSO with BY1PK (Bill, K1MM, at the key) on 20 meters under less than good conditions. Jim had really been in there plugging for BY and it was good to see him catch China. Congratulations Jim!

KO1NR Tom has been kinda quiet up there in Shellrock but once in a while he surprises us with his call in a pileup. Tom works for IBM servicing there gear. He is a good one to get an opinion from regarding personal computers. Right Tom?

K0CF, Craig, and W0PPF, George, were both active in the contests this last year. Craig is our coordinator for the EIDX A QSL card printing chores. It sure would be nice to hear you guys on the repeater.

W0N3N, Joe our new President, along with Bob, W4N1N, have jointly been working on a bulletin board RTTY terminal for general use. Joe and Bob are resident experts on Apple's. Bob is a factory representative and Joe has owned and extensively used one for a couple of years.

Our people taking on the duties of the club repeater have done a very fine job. Speaking especially to Al, KOVH, and Bob, W4N1N. We really appreciate the fine service the machine is providing.

Tom, KOV2R in Jesup is a QSL manager now for a couple of DX stations. He has also got on the "80 meter DX watch" band wagon getting the SBDXCC bug.

KFOZ Jan is doing a super job with the "Bandspread" a Cedar Valley amateur radio club publication. He is not on the air as much although I'm sure his typing speed is picking up.

W0SML our "University Girl Watch King", has been doing just that, spending most of this Fall season making his rounds to the midwest Universities compliments of Uncle Sams Navy inspection team. Doug has been so darn busy traveling he hardly has time to

pick up his mike or swat his bug. It will be good to hear you on more this winter Doug.

KK0U, Paul in Clinton, should get a little DX spotting help with Roger N4RR moving withing VHF range. Paul is a big signal on 80 meters with his sloper at 60 Ft.

KZ0C, Jim, and KDOHY, Terry, have been turning in good multi-single contest scores from Jim's QTH. Jim is now the president of the Waterloo radio club and Terry just had a new addition to his family this Fall. Both have found it a little harder to find time to tune as much as they like.

I've tried to write a line or two on what going on in the club. It is not easy if I have no inputs. If you can drop us a postcard and let us know whats happening we'll print it.

73 de W0WP

For Sale

=====

GalaxvIII, DX100, Collins 51J3, Collins 51J4 all equipment negotiable. If interested contact Stan Morning WBOYSN 854-7673

Winter DX

=====

VU7-Laccadive Islands-

The present permission granted by the Indian government to activate the Laccadives is good through March 31st. Expect a couple more groups to operate before the period ends.....

XU1SS Cambodia-

It counts. This station appears to be permanent now. Showing in the mornings long path both CW and SSB.....

Minutes of the EIDXA meeting of Oct 14, 1983. The meeting was called to order by President KDØQ at 7:45 at the REC building in Marion, Iowa.

Members in attendance were: KDØQ, LUZ, GT, MJN, XK, EAN, AKØM, KKØU, PPF, AFL, AWL, SML, CF, VZR, KBØV, WDØEIF, AKØP, PR, KPØZ, SR, IZ, GVB, INR, AL, VM, HY, KKØB, KZØC, NBØH, WP, KCØQ, JSY, EJ, and KJØD

One visitor was in attendance: KUØA.

Minutes of the last meeting were read and approved.

The EIDXA treasury balance is \$114.12.

KØVM, Al gave a report on the EIDXA repeater. The J pole antenna was installed in Sept. 1983. The transmitter appears to be working ok. There were some problems at the receiving antenna location that are now corrected. \$11.50 was spent and the repeater budget is now at \$73.50. It was requested by Joe, WØMJN that members refrain from Kerchunking the repeater. There was discussion regarding the receiving problems in the outlying areas. Especially to the Northwest. It was agreed to correct the hardline and the matching sections before winter sets in. The hardline appears to have more than an average loss in power between the transmitter and antenna.

Roger, N4RR has moved to Rockford, Ill. Wade, WØEJ has taken over the duties of the want list. Also a pizza party was to be arranged for Roger in the near future to say good bye and good luck.

KØCF, Craig, checked to see if there was any interest in QSL's. At least seven raised hands, so there will be an order of qsl's in quantities of 3000 in the near future.

Jim, WØSR, gave a report on DXAC activities.

KDØHY, Terry, and Jack, NBØH were present their EIDXA membership certificates.

KUØA, Nelson, applied for Associate membership in the EIDXA and was unanimously elected.

Discussion of the constitution and bylaws changes was the next order of business. A motion was made to accept the constitution and bylaw changes as published in the EIDXA newsletter of Fall, 1983, postmarked Oct. 4, 1983 with one change. "EIDXA dues must be paid by the January meeting to retain membership in EIDXA." The motion was seconded.. A motion was made to separate the first motion into two separate questions---the constitution and then the bylaws. The motion was seconded. The amendment vote carried. Then the constitution changes carried and finally the by-laws changes motion carried.

It was encouraged that all members ought to get into the contests at least a few hours and the score be submitted for aggregate score. It was felt that EIDXA had the potential to score in the top six in the contest if all put forth an effort.

Election of officers:

Nominated for president: KØJSY, WØMJN, KZØC-----elected WØMJN

Nominated for vice president: KZØC, WØWP, KØCF-----elected WØWP

Nominated for secretary-treasurer: KØLUZ-----elected KØLUZ

The meeting adjourned at 9:23

Respectfully Submitted

Gary "Red" Letchford KØLUZ

Gary "Red" Letchford KØLUZ

K06VB Reports on SS9/W5LFL

=====

23 December 1983-

I'm sitting here watching the mercury try to push the bottom out of the thermometer. Man is it cold!

A lot of interesting things going on with WOSD passing through and announcing that 300 or so calls are on the W5LFL tape, I don't think my chances are too good but at least we gave it a try. Even hearing Owen was a thrill, I recorded it like most of the guys but kept re-recording and messed the whole thing up. Hi. I would imagine that Owen will be at Dayton, just a guess, but I think it would be great to be able to shake hands with him. The whole SS9/W5LFL event was just fantastic, it should have happened years ago, and I think now that it should be a part of every SS flight if at all possible. Perhaps the excitement of actually having a QSO with the SS flight cannot be shared with the public in general as it can be the Radio Amateurs, but the publicity created by the event is great for all. If any one event could give Amateur Radio a good shot in the arm it was the W5LFL SS9 Flight. The publicity and relationship created between Amateur Radio and NASA comes at a good time and are primarily due to the efforts W4KFC put forth. Vic was a real sparkplug for the SS9 Flight and its very ironic that he should become a silent key on the eve of the operation. I had the opportunity to visit with Vic at the National Convention and had worked him several times on 160, the last time was from the Bahamas. I would imagine that some type of tribute is forthcoming from the ARRL in recognition of Vic and his connection with the W5LFL flight.

I believe that all amateurs should write to the ARRL and especially NASA and let their feelings be known, mention of course the positive publicity created for both groups. I see no reason why amateurs cannot be aboard every SS flight, we'll have separate country status or at least some sort of different status for the SS flights in regard to the ARRL Awards.

On a personal level the operation was really fun. I learned a lot about tracking, locating, LOS, AOC and all those neat sounding terms which the bird chasers have been working with for a long time. I met and talked to amateurs on different frequencies comparing notes, so this offered a common bond to further unite Amateurs in a cause.

I found out that old Roger W0IJY really put his computer where his mouth is, he has been talking computer for a long time but those who were chasing Owen soon found out that Roger had the information that was "on the money."

I feel my chances as a lot of guys feel are pretty slim to be on the "list" that Owen worked. But even if not it was worth every minute of time spent just to be a part of a "First." I think the next SS flight is scheduled for early 1984, so lets hope a better set-up for working guys will be on board.

160 meters has been fun lately, really rough on the sleep but have worked in the last few weeks NP4GD, HH2VP, G3RPS, OK2PGU, G3POA, G3SZA, PA3BFH, PA0HIP, EA3VY, AZ5ZA (So. Orkney), Z95BP, UK2RDX, SM7BIC, F8VJ, GW3YDX, HB9AND, DL1YD, CT4BD, VP2EA6, PJ7A, AH6P, KH6AT, ZF2HF, ZF2CC, LU9EIE, D4BEG, CO1RH, to mention a few.

61 & 73, de gary K06VB

Dates to Remember

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Feb 18-19 ARRL International DX Test CW

Mar 3-4 ARRL International DX Test SSB

Mar 24-25 CQWW WPX SSB Test

Mar 30-Apr 1 Midwest Division Convention
(Kearney, Neb.)

Apr 27-29 Dayton Hamvention

May 26-27 CQWW WPX CW Test

CALL	GRADE	NAME	ADDRESS	HOME PHONE	WORK PHONE
W4NIN	F	Bob Hill	2510 White Eagle Trail, SE, CR 52403	366-3975	393-1300
N4RR	F	Roger Hoffman	2045 Deepwood Ct., SE, CR 52403	364-2400	
N9BD	F	Joe Visalli	Rt 2, Box 4, Parkersburg 50665	346-2220	
KUQA	A	Nelson Moyer	28 Ealing Dr., Iowa City 52240	351-8775	353-5990
NQAFL	F	Davie Holcomb	609 6th Ave., Coralville 52241	351-4380	353-5990
KQAL	F	Al Culbert	618 First Ave., Charles City 50616	515-228-1443	515-257-2111
WDQAWL	F	Terry Cellman	511 Park, Ainsworth 52201	657-3681	
KZQC	F	Jim Bohnsack	1169 Rainbow Dr., Waterloo, 50701	233-7189	
KQCF	F	Craig Fastenow	1207 Wylde Green Rd., Iowa City 52240	351-8258	353-3092
KAQD	F	Mike Keeley	909 12th St., Eldora 50627	858-3761	858-5402 ext 302
KJQD	F	Eric Santon	947 Belmont Pkwy, NW, CR 52405	396-0073	398-7003
WQEAN	F	Bob Joy	5750 Country Lane, NE, CR 52401	393-6342	366-7511
WDQEIF	F	Bob Mahan	208 N. 14th St., Marshalltown 50158	752-8540	754-2922
WQEJ	F	Wade Walstrom	7431 Macon Dr., NE, CR 52401	393-8982	395-4260
ADQF	I	Rick Heinrich	3 Arlington Dr., Pittsford N.Y. 14534		
WQFO	F	Gayle Lawson	1509 Oakland Rd., NE, CR 52402	364-6284	395-1508
KBQFP	A	Tom Melichar	RR1, Shell Rock 50670	885-4803	
KQGT	F	Gary Toomsen	1056 Eisenhower Rd., Hiawatha 52233	395-9329	395-3577
KQGV8	F	Gary Ernst	RR2, West Branch 52358	643-2287	643-2516
NBQH	A	Jack Muckler	2084 Eastern Blvd., SE, CR 52403	362-3462	395-4208
KDQHY	A	Terry Becker	1915 Burnside Ave., Waterloo 50707	233-2008	296-3600
KJQI	F	Joel Bagley	Box 102, 1025 7th st., DeWitt 52742	659-9860	659-8490
KQINR	F	Tom Taylor	RR1, Shell Rock 50670	885-4400	236-1500
WQIZ	F	Dale Repp	1618 Texas Ave., NE, CR 52402	393-6724	
KQJSY	F	Keith Erickson	1810 Hillside Dr., NW, CR 52405	396-8510	398-3551
KQLU2	F	Gary Letchford	3808 Laurinda Dr., Cedar Falls 50613	277-4136	266-3505
AKQM	F	Steve Sutterer	2308 Victory Dr., Cedar Falls 50613	277-2194	292-8767
WQMJN	F	Joe Finkstein	2501 27th Ave., Marion 52302	377-6573	395-2294
AKQP	I	Gene Ellis	2105 Bittersweet Rd., Marshalltown 50158	752-2196	754-2402
WQPPF	F	George Carsner	411 Terrace Rd., Iowa City 52240	338-1601	354-9200 ext. 299
KBQPR	F	Larry Jemison	3805 Pine Tree Dr., NE, CR	393-2663	
KCQO	F	Jeff Russell	2125 Linmar Dr., NE, CR 52402	363-4139	395-4664
KDQO	F	Glenn Thorne	1210 18th St., SW, CR 52404	366-0285	399-3267
KMQQ	A	Craig Anderson	101 Park Ave., S., Eldridge 52748		
KKQR	F	Bob Tillman	1257 Deloris Dr., Waterloo 50701	232-8223	291-7413

CALL	GRADE	NAME	ADDRESS	HOME PHONE	WORK PHONE
WØRU	A	Wayne Groff	735 33rd St., NE, CR	362-6518	395-4221
WØSML	F	Doug Byal	2835 18th Ave., Marlon 52302	377-8963	353-4494
WØSP	F	Jim Spencer	3712 Tanager Dr., NE, CR 52402	393-7353	395-2305
KKØU	I	Paul Feddersen	703 Eclipse Ln., Clinton 52732	242-9910	242-6214
WØUZ	F	John Nelson	3109 Terry Dr., SE, CR 52403	365-4432	395-2742
KØV	F	Matt Dickinson	330 N. Division, Cedar Falls 50613	277-7638	292-8734
KØVM	A	Al Groff	1446 Council St., NE, CR	393-8134	395-4666
WØVX	F	Dave Jaksa	2721 28th Ave., Marlon 52302	377-7507	395-3642
KØVZR	F	Tom White	1244 4th St., Jesup 50648	827-6738	334-6051
WØVP	F	Tom Lindgren	1260 13th Ave., Marlon 52302	377-4279	395-1953
KØJXK	F	Brian Joy	5750 Country Lane, NE, CR 52401	393-6342	
ACØZ	F	Bill Delaney	2818 Garden Ave., Cedar Falls 50613	277-5150	
KFØZ	F	Jan Clute	209 Fifth Ave., N., Mt. Vernon 52314	895-6435	927-2143

CQ World Wide 1982 EIDX Results

=====

Single Op--

NOGA 661,329 pts. (2nd zero land)
 KOLUZ 655,074 (3rd zero land)
 KOGT 202,464
 WOPPF 102,784
 KKOR 101,374
 WDOEIF 50,304
 KOVM 25,029
 KOAL 4,089
 WOSR 1,740
 NOAFL 39,783 (15m)
 WOVX 5,740 (75m)

Multi-Single--

KOJSY 1,293,520
 AKOM 404,424
 WBOUFL 349,225
 KCOXK 164,688
 KBOFF 1,254

operators: KOJSY & WOPF; AKOM & KBOV;
 WBOUFL & KDOHY; KCOXK & WOEAN; KBOFF
 & KOINR.

CQ World Wide CW 1982

=====

Single Op--

WOWP 969,813 pts.
 AKOM 150,300
 AKOP 65,331
 WOIZ 51,128
 WOSR 49,536
 KCOQ 41,850
 WOVX 450 (80m)

Multi-Single--

KBOFF 392

CLUB SCORE 5,449,694 pts. 16th in
 USA

WPX SSB 1982

=====

Single op--

KFOZ 69,984
 WOPPF 62,721
 KJOD 29,624 (10m)

WPX CW 1982

=====

Single Op--

KMOQ 205,998 (20m) op KJOI
 KJOI 3,072 (80m) op KMOQ

WPX CLUB SCORE 341,775 pts. 50th in
 USA

Sweepstakes CW 1982

=====

NOGA 153,738 (1st in Iowa)
 N4RR 141,840 (2nd in Iowa)
 KOLUZ 126,288 (low power)
 WOIZ 87,640
 KKOR 36,120
 AKOM 20,272
 KBOPR 8,528

Sweepstakes SSB 1982

=====

KOAL 142,080 (1st in Iowa)
 KOLUZ 102,416
 KBOPR 88,760
 WOPPF 44,200

CLUB SCORE 852,686 pts. 11th in
 medium class

ARRL DX Contests SSB 1983

=====

Single Op--

KOCF 165,240 (1st in Iowa)
 WOPPF 53,835 (2nd in Iowa)
 KOVZR 38,088
 KKOR 31,125
 WOMJN 15,624
 WOUZ 11,076
 WOEJ 2,232

WOSML 243 (40m)
 NOAFL 7,659 (15m)
 KOGT 31,875 (ORP)

Multi-Single--

KOJSY 543,864
 KBOV 336,582
 WBOUFL 264,228
 WOEAN 69,201
 KOINR 2,511

operators: KOJSY & KBOPR & KDOO &
 WOWP; KBOV & AKOM; WBOUFL & KDOHY;
 WOEAN & KCOXK; KOINR & KBOFP.

ARRL DX Contest CW 1983
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Single Op--

WOWP 537,654 (1st in Iowa)
 KDOO 335,871 (2nd in Iowa)
 NOGA 201,150
 KOCF 39,411
 KKOR 27,144
 KCOXK 21,000
 WOMJN 8,547
 AKOP 3,132 (80m)
 KOLUZ 2,772 (80m)
 KCOO 1,584 (80m)
 WOSML 192 (40m)
 KJOD 1,188 (40m)

Multi-Single--

KOINR 324 pts.

operators: KOINR & KBOFP.

CLUB SCORE 2,678,052 pts. 9th in
 USA medium class

RSGB, conducted a similar survey among
 the subscribers. Seventy replies were re-
 ceived, and we have tabulated the results
 below -- with the actual number, out of 70
 -- needing that country.

scribers of this publication, it was a good
 overall indication of what was needed by
 all DXers, with the most-needed country
 at the top of the list.
 DX News Sheet, published by the

Countries wanted survey
 In the last issue, we ran the results of a
 DX survey that was conducted by *The*
DX Bulletin. Although the countries
 needed survey was directed at the sub-

Country	Needed	rank
Cocos Island	13	56
Bhutan	12	26
Central Kiribati	12	-
Meallish Reef	12	40
Marion Island	12	24
Equatorial Guinea	12	43
Crozet	11	46
American Phoenix Islands	11	-
United Arab Emirates	9	15
Taiwan	9	28
Mozambique	9	25
Niger	9	23
Minami Torishima	8	67
Midway Island	8	-
Ethiopia	7	35
Western Caroline Islands	7	-
Kure Island	7	-
Mount Athos	7	21
Heard Island	7	55
Glorioso Island	6	33
Tromelin	6	39
Johnston Island	6	-
Pitcairn Island	6	-
Macquarie Island	6	-
South Georgia Islands	6	30

Country	DXCC	Rank	TDXB	rank	Needed
T19	27	8	56	56	56
A5	28	6	55	55	55
T31	29	2	52	52	52
VK9	30	7	48	48	48
ZS2	31	1	47	47	47
3C	32	4	42	42	42
FB8W	33	11	36	36	36
KH1	34	10	33	33	33
A6X	35	6	33	33	33
BV	36	9	31	31	31
C9	37	22	29	29	29
6U	38	60	28	28	28
JD1	39	17	27	27	27
KH4	40	20	25	25	25
ET	41	48	23	23	23
KC6	42	16	23	23	23
KH7	43	9	21	21	21
SV/A	44	13	21	21	21
VK0	45	-	19	19	19
FR/G	46	27	18	18	18
FR/T	47	14	16	16	16
KH3	48	14	16	16	16
VR6	49	19	15	15	15
VK0	50	29	15	15	15
VP8	51	-	14	14	14

Rank	DXCC	Country
1	CE0X	San Felix
2	XZ	Burma
3	VU7	Laccadive Islands
4	3Y	Bouvet Island
5	ZA	Albania
6	70	South Yemen
7	HK0	Malpelo Island
8	XV	Viet-Nam
9	VU7	Andaman & Nicobar Islands
10	BY	China
11	FO0	Clipperton Island
12	KH5K	Kingman Reef
13	ZL8	Kermadec Islands
14	IS	Sprally Islands
15	KH5	Palmyra Island
16	5A	Libya
17	XU	Kampuchea
18	4W	Yemen
19	XF4	Revilla Gigedo
20	YV0	Aves Island
21	S2	Bangladesh
22	XW	Laos
23	S9	Sao Tome and Principe
24	VP8	South Sandwich Islands
25	KH9	Wake Island
ac	VA	Afghanistan

- I. MEMBERSHIP: Applications for membership shall be submitted in writing on forms provided by the Secretary. Each applicant shall express a willingness to abide by the Constitution, By-Laws, and other rules promulgated by the club.

Two-thirds of the Full Members must approve the application before membership is granted. Membership shall be in four classes with requirements as follows:

A. ASSOCIATE MEMBER:

1. All requirements above.
2. Valid Amateur Radio license and membership in the ARRL.
3. Payment of dues as assessed by the By-Laws.
4. Permanent residence within 175 miles of Cedar Rapids, Iowa.
5. Attendance at 50% of the club meetings.
6. Must upgrade to full membership in two years from the time of joining the club.

B. FULL MEMBER:

1. All requirements of an Associate Member.
2. Possession of at least 100 QSLs from 100 different countries in accordance with a current ARRL DXCC countries list or possession of an ARRL DXCC Award. This requirement may be met either with a current call sign or a previous call sign, or a combination of both.

C. INACTIVE MEMBER:

1. Must be or have been an Associate or Full member in good standing.
2. If a member fails to maintain Full or Associate membership he/she automatically becomes an inactive member.
3. Inactive membership status may be maintained indefinitely by payment of the regular yearly dues.
4. Inactive membership status allows all EIDX privileges except that he may not vote or participate in contest for club aggregate scoring. He/she will receive notice of the club meetings, the newsletter and be eligible for club promotions.

D. HONORARY MEMBER:

1. In recognition of special service to the EIDX or the DX community, an Honorary membership may be awarded to any individual.
2. A two-thirds vote of the full members is required for Honorary membership.
3. An Honorary member receives a membership certificate and can use the club logo or club name to identify himself as a club member.
4. An Honorary member does not pay club dues, does not receive the club newsletter and is not eligible to vote or participate in contest aggregate scoring.

E. MAINTENANCE OF MEMBERSHIP:

Failure to continue to meet all requirements for a particular membership class constitutes nonmembership status. Specifically:

1. ARRL membership and valid license.
2. Payment of dues by the January meeting.

II. MEETINGS: Regular meetings shall be held quarterly, normally during the months of January, April, July, and October at a time and place as ordered by the President. Special meetings may be called by the Executive Committee (consisting of the President, Vice-President, and Secretary-Treasurer) provided a reasonable effort is made to notify all members.

1. The meetings are chaired by the President or other ranking club officer in his absence.
2. The election of officers shall be held during the October meeting.

III. DUES: A regular yearly assessment of \$4.00 per member is hereby assessed in accordance with Article V of the Constitution for the purpose of providing operating funds for current expenses. The EIDXA year runs from October 1st of one year to September 30th of the following year. Dues must be received by the day of the January EIDXA meeting.

IV. OFFICERS:

1. New officers take office at the end of the October meeting.
2. The Executive Committee may authorize emergency expenditure of club funds to \$15.00. Approval of a majority of the membership is required for emergency expenditures above that level as well as for all routine expenditures.
3. Emergency expenditures are reported by Secretary-Treasurer at the next regular club meeting.
4. The Vice President is editor-in-chief of the EIDXA newsletter.

V. NEWSLETTER: The EIDXA newsletter shall be published quarterly two weeks prior to the club meeting and shall serve as formal notification of the forthcoming meeting.

PREAMBLE:

We, radio amateurs, wishing to secure for ourselves the pleasure and benefits of the association of persons commonly interested in Amateur Radio DXing and Contesting, constitute ourselves the Eastern Iowa DX Association and enact this constitution as our governing law. It shall be our purpose to promote co-operation, exchange of information, improved operator proficiency, and fraternalism so as to advance DX activity and Contesting within the amateur radio community.

MEMBERSHIP:

ARTICLE I

Persons interested in DX and/or contesting amateur radio communications shall be eligible for membership. Membership shall be by application and election upon such terms as the club shall by its By-Laws provide.

OFFICERS:

ARTICLE II

Sec. 1 - The officers of this club shall be: President, Vice-President, and Secretary-Treasurer and shall be Full Members.

Sec. 2 - The officers of this club shall be elected for a term of one year by ballot of the Full Members at the Fall meeting.

Sec. 3 - Vacancies occurring between elections shall be filled by elections at the first meeting following the occurrence of the vacancy.

Sec. 4 - Officers may be removed by a 3/4 vote of the Full Members.

DUTIES OF OFFICERS:

ARTICLE III

Sec. 1 - The President shall preside at all meetings of this club, and conduct same according to the rules adopted. He/She shall enforce due observance of this constitution and by laws; decide all questions of order; sign official documents adopted by the club; and perform all other customary duties pertaining of the office of President.

Sec. 2 - The Vice-President shall assume all the duties of President in the absence of the latter.

Sec. 3 - The Secretary-Treasurer shall keep a record of the proceedings of all meetings, keep a roll of members, carry on all correspondence, and maintain the constitution and by-laws. He/she shall receive and receipt for all monies paid to the club, keep an accurate account of all monies received and expended, pay all bills authorized by the club or its officers constitution an Executive Committee. He/she at the end of his/her term turn over all records and items belonging to the club to his/her successor.

MEETINGS:

ARTICLE IV

The By-Laws shall provide for regular and special meetings.

DUES:

ARTICLE V

The club, by majority vote, may levy upon the membership such dues or assessments as shall be deemed necessary for the business of the club.

AMENDMENTS:

ARTICLE VI

This constitution or the By-Laws may be amended by a 2/3 vote of the Full Members

QUORUM:

ARTICLE VII

A quorum is at least 1/3 of active membership.

RULES:

ARTICLE VIII

Robert's Rules shall govern the proceedings.

W O W P
TOM LINDGREN
1260 13th Ave.
Marion, Iowa 52302

WOSR
Jim Spencer
3712 Tanager Dr., NE
Cedar Rapids, Iowa 52402